

gamma-tocopherol by HPLC µg/g

Fraction I <sup>a)</sup>	Tr
Fraction II <sup>b)</sup>	Tr

delta-tocopherol by HPLC µg/g

Fraction I <sup>a)</sup>	N.D.
Fraction II <sup>b)</sup>	N.D.

all-trans retinol by HPLC (IU)

Fraction I <sup>a)</sup>	395,57
Fraction II <sup>b)</sup>	440,47

cholecalciferol by HPLC (IU)

Fraction I <sup>a)</sup>	N.D.
Fraction II <sup>b)</sup>	N.D.

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Data from Professor Robert Ackman's laboratory, Canadian Institute of Fisheries Technology,

Halifax, Nova Scotia.

Data expressed per gram of krill oil.

<sup>a)</sup> : Extraction made with a sample-acetone ratio of 1:6 (w/v), incubated 2h at 4°C.

<sup>b)</sup> : Extraction made with a sample-ethyl acetate ratio of 1:2 (w/v), incubated 30 min at 4°C, following a first extraction with acetone.

TR = trace

N.D. = not detected

Conversion : Vitamin	alpha-tocopherol	mg/g oil x 1,36 = International Unit
	All-trans retinol	µg/g ÷ 0,3 = International Unit

**TABLE [18]17. ASTAXANTHIN AND CANTHAXANTHIN CONTENT OF KRILL OIL  
(*E. pacifica*)**

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Astaxanthin (µg/g oil)

Fraction I <sup>a)</sup>	93,1
Fraction II <sup>b)</sup>	121,7

Canthaxanthin (µg/g oil)

Fraction I <sup>a)</sup>	270,4
Fraction II <sup>b)</sup>	733,0

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Data from Professor Robert Ackman's laboratory, Canadian Institute of Fisheries Technology,  
Halifax, Nova Scotia.

<sup>a)</sup> : Extraction made with a sample-acetone ratio of 1:6 (w/v), incubated 2h at 4°C.

<sup>b)</sup> : Extraction made with a sample-ethyl acetate ratio of 1:2 (w/v), incubated 30 min at 4°C,  
following a first extraction with acetone.

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**TABLE [19]18. OPTIMAL CONDITIONS FOR LIPID EXTRACTION OF AQUATIC ANIMAL TISSUES (suggested procedure)**

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<u>STEP</u>	<u>CONDITIONS</u>
Grinding (if particles > 5mm)	4°C
Lipid extraction	sample-acetone ratio of 1:6 (w/v) 2h (including swirling 20 min) 4°C
Filtration	organic solvent resistant filter

	under reduced pressure
Washing	sample-acetone ratio of 1:2 (w/v) pure and cold acetone
Filtration	organic solvent resistant filter under reduced pressure
Evaporation	under reduced pressure
Oil-water separation	4°C
Lipid extraction	<u>sample: ethyl acetate</u> ratio of 1:2 (w/v) <sup>a)</sup> <u>pure ethyl acetate</u> 30 min 4°C <sup>b)</sup>
Filtration	organic solvent resistant filter under reduced pressure
Evaporation	under reduced pressure

<sup>a)</sup>: Ethanol can be replaced by isopropanol, *t*-butanol or ethyl acetate.

<sup>b)</sup>: 25 °C when using *t*-butanol.

**TABLE [20]19: PROTEOLYTIC ACTIVITY OF KRILL RESIDU USING LACTOSERUM AS THE SUBSTRATE, AT 37 °C, PH 7.0 FOR A RATIO ENZYME:SUBSTRATE OF 1:43**

Time (min)	Amino acids released ( $\mu$ moles)	Enzymatic rate ( $\mu$ moles/min)	Specific activity	enzymatic
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